

WE CLAIM:

1 1. A strapping connection for a pair of longitudinally
2 extending and transversely overlapping strap ends, the connection
3 comprising:

4 a pair of longitudinally extending and interengaging
5 hook formations formed as transversely pushed-out regions of the
6 strap ends and permitting limited movement of the strap ends in
7 one longitudinal direction; and

8 transversely interengaging lock formations fitting
9 transversely snugly together, prohibiting relative longitudinal
10 movement of the strap ends, and formed in the pair of hook
11 formations.

1 2. The strapping connection defined in claim 1,
2 further comprising

3 a second pair of longitudinally extending and
4 interengaging end hook formations spaced longitudinally from the
5 first-mentioned pair, formed as transversely pushed-out regions
6 of the strap ends, permitting limited movement of the strap ends
7 in one longitudinal direction, and free of the lock formations.

1 3. The strapping connection defined in claim 1 wherein
2 the lock formations are formed as interfitting dimples.

1 4. The strapping connection defined in claim 3 wherein
2 the dimples are pyramidal.

1 5. The strapping connection defined in claim 3 wherein
2 the dimples are conical.

1 6. The strapping connection defined in claim 1 wherein
2 the lock formations pierce completely through one of the strap
3 ends.

1 7. The strapping connection defined in claim 1 wherein
2 each hook formation has an end portion defined between a pair of
3 closely spaced and longitudinally extending cuts, another end
4 portion spaced longitudinally from the one end portion and
5 defined between a pair of widely spaced and longitudinally
6 extending cuts, and an intermediate portion between the end
7 portions and formed between a pair of angled cuts each connecting
8 a respective one of the closely spaced cuts with a respective one
9 of the widely spaced cuts.

1 8. The strapping connection defined in claim 7 wherein
2 the lock formations are formed between the widely spaced cuts.

1 9. The strapping connection defined in claim 1 wherein
2 the lock formations project transversely by a distance equal at
3 least to a thickness of the strap ends.

1 10. A method of joining a pair of longitudinally
2 extending and transversely overlapping strap ends, the method
3 comprising the steps of:
4 pushing regions out of the overlapping strip ends to
5 form a pair of longitudinally extending and interengaging hook
6 formations permitting limited movement of the strap ends in one
7 longitudinal direction; and
8 forming in the pair of hook formations transversely
9 interengaging lock formations fitting transversely snugly
10 together and prohibiting relative longitudinal movement of the
11 strap ends.

1 11. The method defined in claim 10, further comprising
2 the step of
3 forming two further pairs of end hook formations
4 longitudinally flanking the first-mentioned pair of hook
5 formations.

1 12. An apparatus for joining a pair of longitudinally
2 extending and transversely overlapping strap ends, the apparatus
3 comprising:

4 means including an interengaging die and punch tools
5 having wavy faces for pushing regions out of the overlapping
6 strip ends a pair of longitudinally extending and interengaging
7 hook formations permitting limited movement of the strap ends in
8 one longitudinal direction and a pin set in one of the tools for
9 forming in the pair of hook formations transversely interengaging
10 lock formations fitting transversely snugly together and
11 prohibiting relative longitudinal movement of the strap ends.

1 13. The apparatus defined in claim 12 wherein the pin
2 has a width generally equal to a width of a cavity of the die
3 tool and an end formed with a tapered end.

1 14. Th apparatus defined in claim 13 wherein the
2 tapered end has a flat end face.

1 15. The apparatus defined in claim 13 wherein the pin
2 is set in the punch tool and the cavity is formed with a recess
3 in which the pin can fit loosely when the die tool and punch tool
4 are fitted together.

1 16. The apparatus defined in claim 13 wherein the pin
2 is of hardened steel.